AMENDMENT AND RESPONSE UNDER 37 C.F.R. § 1.111

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Serial No. 09/901,374 Filing Date: July 9, 2001

Title: DYNAMIC ALLOCATION OF TRANSMISSION BANDWIDTH IN A COMMUNICATION

SYSTEM

Remarks

Priority

In response to the Examiner's discussion of claim of priority, the specification has been modified to correspond to the claim of priority as found in the signed declaration/oath. A copy of the signed declaration/oath as filed is enclosed for the Examiner's convenience.

The Examiner objected to the declaration/oath and the Applicant does not find that a new declaration/oath is required. The declaration/oath as filed is correct and the cross-reference to related cases paragraph has been amended and corresponds to the application as filed.

Rejection Under 35 U.S.C. § 102, First Paragraph

The Examiner rejected claims 2-12 under 35 U.S.C. § 102(e) as being clearly anticipated by Ortel, et al. (U.S. Patent No. 5,715,242). The Examiner also rejected claims 2-12 under 35 U.S.C. § 102(e) as being clearly anticipated by Dubberly, et al. (5,719,872). Applicant respectfully traverses these rejections as the present application claims priority of an application with an earlier filing date than Ortel et al. The present Application is a divisional of U.S. Application Serial No. 08/673,002 filed 6/28/1996 that is a continuation-in-part of U.S. Application Serial No. 08/384,659 filed 2/6/1995. Ortel's earliest priority document was filed on 12/20/1995, which is over 9 months after the filing date of priority Application Serial No. 08/384,659 filed on 2/6/1995. Further Dubberly et al. was filed on 11/27/1996 over 19 months after the filing date of priority Application Serial No. 08/384,650 filed on 2/6/1995. Based on the foregoing, it is respectfully requested that the Examiner withdraw these rejections.

Claim 2 recites in part "a control circuit, communicatively coupled with the at least one modern, that assigns each service unit to a subband such that the service units are substantially evenly distributed over the subbands."

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Dubberly et al. does not teach or suggest a control circuit that assigns each service unit to a subband such that the service units are substantially evenly distributed over the subbands as found in claim 2. As a result claim 2 should be allowed.

Claim 3 recites in part "a control circuit, communicatively coupled with the at least one modern, that assigns each service unit to a subband such that the load of the service units is substantially evenly distributed over the subbands."

Dubberly et al. does not teach or suggest a control circuit that assigns each service unit to a subband such that the load of the service units is substantially evenly distributed over the subbands as found in claim 3. As a result claim 3 should also be allowed.

Claim 4 depends from and further defines claim 3. Claim 4 recites in part "wherein the control circuit selectively assigns each service unit based on at least an expected load on a control channel in a subband." Dubberly et al. does not teach or suggest the limitation of claim 4. As such claim 4 should also be allowed.

Claim 5 depends from and further defines claim 3. Claim 5 recites in part "wherein the control circuit selectively assigns each service unit based on at least an expected load for the service units." Dubberly et al. does not teach or suggest the limitation of claim 5. As such claim 5 should also be allowed.

Claim 6 depends from and further defines claim 3. Claim 6 recites in part "wherein the control circuit is further operable to allocate a payload channel to a service unit in response to a request for bandwidth for the service unit." Dubberly et al. does not teach or suggest the limitation of claim 6. As such claim 6 should also be allowed.

Claim 7 depends from and further defines claim 3. Claim 7 recites in part "wherein the control circuit is operable to assign a number of service units to each subband for selective use of the payload channels in the subband by the service units so as to increase the number of service units that can be coupled to a communication system." Dubberly et al. does not teach or suggest the limitation of claim 7. As such claim 7 should also be allowed.

Claim 8 is directed to a head end and recites in part "a control circuit, communicatively coupled with the at least one modern, that assigns each service unit to a

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subband such that the service units are substantially evenly distributed over the subbands, and wherein each subband includes a number of payload channels that transmit data at a first rate and a control channel that transmits data at a second rate, the second rate being slower than the first rate." Dubberly et al does not teach or suggest a control circuit that assigns each service unit to a subband such that the service units are substantially evenly distributed over the subbands as found in claim 8. Further Dubberly et al does not teach or suggest wherein each subband includes a number of payload channels that transmit data at a first rate and a control channel that transmits data at a second rate, the second rate being slower than the first rate as found in claim 8. As a result claim 8 should also be allowed.

Claim 9 depends from and further defines claim 8. Claim 9 recites in part "wherein the control circuit selectively assigns each service unit based on at least an expected load on a control channel in a subband." Dubborly et al. does not teach or suggest the limitation of claim 9. As such claim 9 should also be allowed.

Claim 10 depends from and further defines claim 8. Claim 10 recites in part "wherein the control circuit selectively assigns each service unit based on at least an expected load for the service units." Dubberly et al. does not teach or suggest the limitation of claim 10. As such claim 10 should also be allowed.

Claim 11 depends from and further defines claim 8. Claim 11 recites in part "wherein the control circuit is further operable to allocate a payload channel to a service unit in response to a request for bandwidth for the service unit." Dubberly et al. does not teach or suggest the limitation of claim 11. As such claim 11 should also be allowed.

Claim 12 depends from and further defines claim 8. Claim 12 recites in part "wherein the control circuit is operable to assign a number of service units to each subband for selective use of the payload channels in the subband by the service units so as to increase the number of service units that can be coupled to a communication system." Dubberly et al. does not teach or suggest the limitation of claim 12. As such claim 12 should also be allowed.

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Conclusion

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is carnestly requested. If the Examiner has any questions or concerns regarding this application, please contact the undersigned at (612) 332-4720

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 502432.

Respectfully submitted,

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